

# WELCOME!



September 13, 2010

Dear Parents and Guardians,

My name is Ms. Johnson and I am enthusiastic about having your child in my AP Environmental Science class! I know that we will have an exciting, successful, and productive year.



The AP Environmental Science exam is one of the most difficult College Board exams. During the first half of the year, we will study how ecosystems function in the natural world. During the second half of the year, we will explore how humans impact the environment. This course is interdisciplinary because it uses all the other sciences to understand our complex world, involved data collection and interpretation, graphing, and evaluating the pros and cons of real-world, complex situations. The content is challenging and I expect this course will change the way your student views our planet.

I have extremely high academic and behavioral expectations for all my students, and I anticipate **every** student will grow to the best of her or his ability and pass the **AP Exam on May 2, 2011**. To aid in this achievement, please note that I assign frequent homework (including many weekends) and test students weekly. Because practice is an important part of learning, I select homework that reinforces the skills your student is expected to master while also avoiding “busywork.”

Organizational skills are critical for teenagers to learn and practice. Therefore, I **require** each student to have a **three-ring binder** to hold his/her work. This will be collected and graded periodically. Please see the attached “Shopping List” for materials that your child will need for my class. These materials should cost less than \$15 and students must bring them to class *every day* beginning **Monday, 9/13**.

Please communicate with me any time if you have questions or concerns. I invite you to contact me through my Google Voicemail (267) 507-4947, and/or email: [kpjohnson@philasd.org](mailto:kpjohnson@philasd.org). Also, I created a class website so parents and students can double-check deadlines, homework, projects, and announcements from home: <https://msjohnsongwbs.wikispaces.com/>. Students received a letter from me this summer and should have already bookmarked this website.

If you wish to meet with me, I will be happy to schedule an appointment before or after school or during my planning period (9:45 – 10:25 am). Also, please attend our Back to School Night on **Thursday, Sept 23 from 6-8 pm**.

I look forward to working with you to help your child grow and learn!

Sincerely,  
Ms. Kelsey Johnson, Room 324



# AP<sup>®</sup> ENVIRONMENTAL SCIENCE

## 2010-11 SYLLABUS

Ms. Johnson  
[kpjohnson@philasd.org](mailto:kpjohnson@philasd.org)

George Washington High School  
Room 324

### Course Outline

This AP Environmental Science course is one of the hardest College Board exams. The course cultivates scientific principles, observation and interpretation skills, and experimental method needed to understand the complex systems of our natural world. Therefore, the course is interdisciplinary by nature and incorporates physics, math, biology, chemistry, politics, history, and economics. As adults, our students will face many difficult environmental issues and will need to evaluate the trade-offs and make decisions as scientifically literate citizens.

Because this course is the equivalent to one semester of college credit, lecture will normally happen two to three times per week, while the remaining class time will be spent doing hands-on activities, experiments, or calculations. The first half of the year we will focus on how ecosystems function naturally. Next, we will spend the second half of the year investigating environmental change, problems, and ways of dealing with them. There will be a large field component to this course. Four overarching themes for the course include:



- 1) Conservation of mass and energy
  - a. Everything comes from somewhere and goes somewhere. Nothing disappears.
- 2) Environmental problems have social, economic, and cultural contexts
- 3) Rates of change and ecosystems' ability to adapt to environmental change
- 4) Stewardship and local action

### Textbook

- Miller, G. Tyler. *Living in the Environment : Principles, Connections and Solutions: 16<sup>th</sup> edition*. Belmont, CA: Thomson Brooks/Cole, 2009.
- College Board Study Guide
- Readings from select chapters of other books will be provided.

### CONTENT

The course content builds in a cumulative way throughout the year. The first half of the year we will focus on the natural functioning of earth systems and the second half of the year we focus on human impacts and global changes. Energy transfer is be a common thread between all units.

 Earth Systems	Unit 1: Introduction and Energy concepts Unit 2: Earth Science Unit 3: Ecology
 Human Impacts	Unit 4: Population and Resources Unit 5: Pollution Unit 6: Global Change

## **GRADING**

I **strongly recommend** that students keep all graded work and double-check the grade I calculate for them. This is good practice for college and basic accounting, as well as allows them to contest a grade. Different types of assignments ‘count differently’ in your final grade:

*Physical Science Grade Weighting*

<i>Criteria</i>	<i>Percentage of Overall Grade</i>
TESTS	40
QUIZZES	15
CLASSWORK, LABS & PARTICIPATION	30
QUARTERLY PROJECT	15

\*It is expected that students will complete homework to prepare for weekly quizzes.

### Quarterly Projects

1. Terrestrial Land Survey
2. Biobottles OR Freshwater pond study (TBD based on access to materials)
3. Renewable fuel production from waste oil
4. Negotiating for a cooler planet

## **BEHAVIOR EXPECTATIONS**

Collaborative group work, presentations, and active participation are key components to an AP class. Students will spend the first few days deciding what expectations are appropriate. Once we have reached consensus, we will post them in the classroom.

*As always, school rules apply in the hallway, my classroom, and on buses.*

## **ACADEMIC INTEGRITY AND HONOR**

You are expected to act with full academic integrity **at all times**. Writing your name at the top of a paper represents *a contract* between you and me that means you neither gave nor received unfair help. If you feel tempted to copy another person’s work or to share your own work, remember that this defeats the purpose of education. If I become aware of such transgressions, they will result in failing grades and disciplinary action. Make good choices!

Working with others is an acceptable practice in college and most workplaces. However, working together looks like a discussion of ideas, **not** splitting up an assignment into pieces, completing one piece, and giving each other the answers. **Everything you turn in** should be in *your own, original words* and something that *you could explain to me* in a conversation.

## **EXTRA CREDIT**

Extra credit assignments will be approved on a case-by-case basis and require a written proposal ahead of time. Extra credit is available “in addition to” your regular credit, **not** “instead of”. This means that you only become eligible to earn extra credit *after* you complete all of your *assigned* work. Extra credit may improve your grade, at a maximum, by half a letter grade (for example, from a B+ to an A-, from a B- to a B, or from a C to a C+).

## **EMAIL ETIQUETTE**

Have you ever thought about how you should contact adults through email? All electronic communication with teachers and other professionals is a formal representation of yourself. When you contact me by email, I expect you to use your best spelling, grammar, and punctuation. Emoticons are acceptable. ☺

# Environmental Science Policies

## Lateness to class

- Pre-class assignments are often quizzes and are due five minutes after the bell rings. If you are late to class, you miss these points.
- Skipped detentions result in an in-house suspension.

## Late work

- Homework is turned in at the beginning of class as students enter the classroom. Any work turned in after the collection is considered late.
- The purpose of homework is to stay up-to-date with class content *and* to practice study habits independently. I encourage students to complete work even if it is late. **Students may submit late homework IF they complete it in my presence (before school, during lunch, or after school) *before* the test for that unit.**
- **Late work will earn a *maximum of half credit*.** (This is still an “F”).
- Students are eligible for extra credit **only after** completing all assigned work.
- Major projects and lab reports may not be submitted late. That is unfair to the students who worked hard to complete it on time.

## Absent work

- Students must always show me documentation of excused absences. Prior notification is best, but I understand it is not always possible.
- Students with excused absences have the same number of days to make up the work as the number of days they were absent.
- It is the student's responsibility to obtain all missed assignments from the file folders hanging in the classroom **promptly**, which are updated every day. I encourage students to also use a “buddy system” with a friend in class. **It is the students’ responsibility to seek out the work they missed during absences.**
- Missed tests or quizzes for an excused absence need to be made up before school, after school, or during the student’s lunch period the following day.

- **Work missed for unexcused absences will not receive credit.** This includes music practice, sports, or other school activities if the student does not tell me *ahead of time*.
- **Quizzes or tests missed during an unexcused absence(s) may not be made up.**

### **Cell Phones/iPods/Electronics**

- Cell phones are inappropriate in the classroom. They are to be **turned off and out of site** in my classroom. Period.

### **Detentions**

- **I hold detentions after school beginning exactly at 2:45 pm.** Detentions typically last 15 minutes for a first offense and 30 minutes for a second offense; however, their duration will be determined on a case-by-case basis. Given the advance notice, it is *the student's responsibility* to modify his/her schedule and make transportation arrangements to enable him/her to attend detention.
- Any student who fails to attend, or arrives late, to my detention will be written up.

### **Severe Clause**

- Students who choose to use profane language, fight, or damage property will be written up promptly.
  - Using obscene language or gestures, making unreasonable noise, fighting or threatening are *illegal* and defined as *disorderly conduct*. This behavior has no place in school.
  - See Student Handbook (page 34).

I encourage ALL students to make good choices. You can count on me to do my job, and I am counting on you to do yours. I look forward to you being your best!

Sincerely,

Ms. Kelsey Johnson  
George Washington High School



Environmental Science Orientation  
Student/Parent Checklist

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Pd# \_\_\_\_\_

Parents and Students:

Please read over all of the attached sheets, check them off using the list below, and sign the appropriate spaces.

We have been provided with:

- \_\_\_\_\_ Letter of Introduction
- \_\_\_\_\_ AP Exam Expectations Agreement
- \_\_\_\_\_ AP Environmental Science Syllabus
- \_\_\_\_\_ Environmental Science Policies
- \_\_\_\_\_ Shopping List and Daily Required Materials

\_\_\_\_\_  
Signature of parent

\_\_\_\_\_  
date

\_\_\_\_\_  
Signature of student

\_\_\_\_\_  
date

**I must return this form to Ms. Johnson by:**

\_\_\_\_\_  
Insert date

Note: Once you remove the staple and turn the checklist in, be sure to **place these handouts in the second section of the 3-ring binder.** You will refer to them often!

# Shopping List and Daily Required Materials

These items need to be brought with the student to class every day:

- **Three-ring binder** (1 or 2 inch spine, heavy duty)
  - Labeled in clear, permanent marker on the front cover with:
    - student's first and last name
    - book number (advisory)
    - Physical science class period
  - **Five section dividers**
    - Section 1: labeled "*Course Information*"  
Contents: All orientation sheets, binder rubrics, other rubrics.
    - Section 2: labeled "*Pre-class*"  
Contents: all pre-class assignments with the most recent on top.
    - Section 3: labeled "*Notes*"  
Contents: All class notes and worksheets in chronological order.
    - Section 4: labeled "*Homework*"  
Contents: All hand-written homework assignments and worksheets.

**\*\*Each sheet must follow the proper heading:\*\***  
(see sample posted in the classroom or below):

Unit Number	Your name
Assignment	Class Period #
Date	Seat #

Skip at least 3 lines between problems to allow space for corrections.

- Section 5: labeled "*Quizzes and Miscellaneous*"  
Contents: Keep all quizzes here in chronological order. Also, keep extra paper and other things that are not specified in other sections.
- **Ink pen (Blue or black)**
  - **2 Pencils (sharpened)**
  - **Small ruler** with SI (metric) units (best: very flat, very clear)
  - **Notebook paper** (looseleaf; wide-ruled is preferred but not required)
  - **Scientific calculator** that allows for exponents.
    - Buttons may look like one of these: " $\wedge$ ", " $10^\wedge$ ", " $10^x$ ", "E", "EE", or "exp"
    - Models include: